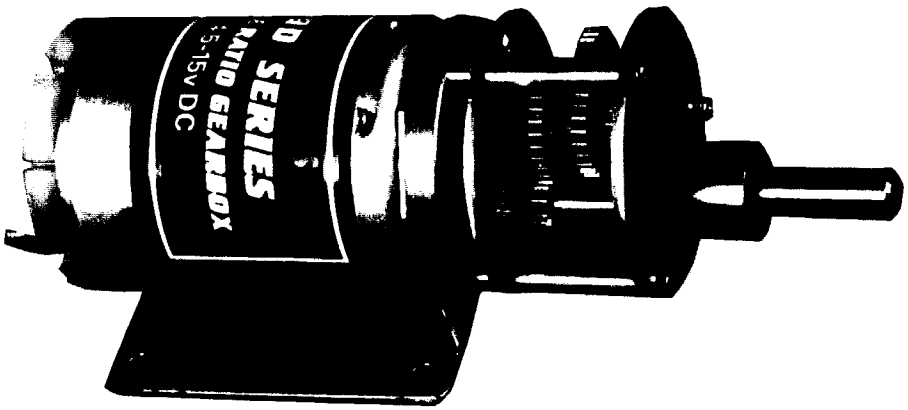
MFA / COMO DRILLS

919D SERIES SINGLE RATIO METAL GEARBOX (RE 540/1 MOTOR)



RATIOS NOW AVAILABLE AS EX-STOCK ITEMS.

NEW!	919D2.51	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 2.5:1
	919D61	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 6:1
	919D111	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 11:1
	919D501	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 50:1
	919D1481	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 148:1
	919D8101	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 810:1
NEW!	919D30001	(4.5v - 15v)	WITH RE 540/1 MOTOR.	RATIO 3000:1

Designed for heavy-duty industrial and model applications this robust unit boasts a powerful high quality, three pole motor with sintered bronze bearings. The all steel gearbox incorporates bronze output bearings, enabling the high torque transfer from the motor to be transmitted through the gearbox. The unit is mounted on a 1mm thick plated steel bracket.

MOTOR DATA. (RE-540/1)

MODEL	VOLTAGE		NO LOAD		AT MAXIMUM EFFICIENCY						STALL TORQUE	
	OPERATING RANGE	NOMINAL	SPEED	CURRENT	SPEED	CURRENT	TORQUE		OUTPUT	EFF		
			R.P.M.	A	R.P.M.	A	oz - in	g - cm	W	%	oz - in	g - cm
RE - 540/1	4.5 - 15.0	6.0v CONSTANT	7500	0.45	6180	2.1	1.64	118.2	7.49	59.4	9.31	670
		12.0v CONSTANT	15800	0.52	13360	2.85	2.14	154.4	21.2	61.9	13.9	1000

REDUCTION TABLE. R.P.M.

SUPPLY VOLTAGE	4.5v	6.0v	9.0v	12.0v	15.0v
919D2.51	2250	3000	4500	6300	7900
919D61	990	1316	1975	2633	3295
919D111	540	718	1077	1436	1800
919D501	120	158	237	316	395
919D1481	40	53	80	106	132
919D8101	8	10	15	20	25
919D30001	1.5	2	3	5	6

WEIGHT	
919D2.51	240g
919D61	234g
919D111	238g
919D501	246g
919D1481	255g
919D8101	255g
919D30001	262g

TORQUE TABLE (g.cm). (Theoretical rating for motor & gearbox combined).

	AT MAXIMUM EFFICIENCY 6V	12V	STALL TORQUE 6V	12V
RE 540/1 (2.5)	295	386	1675	2500
RE 540/1 (6:1)	709	926	4020	6000
RE 540/1 (11:1)	1300	1698	7370	11000
RE 540/1 (50:1)	5910	7720	33500	50000
RE 540/1 (148:1)	17493	22851	99160	148000
RE 540/1 (810:1)	95742	125064	542700	810000
RE540/1(3000:1)	354600	463200	2010000	3000000

IMPORTANT NOTICE
Due to the wide range of applications for this product it is the users responsibility to establish the products suitability for their individual purpose(s).

NOTE: To establish Torque Rating in nM divide g.cm by 10,197.0

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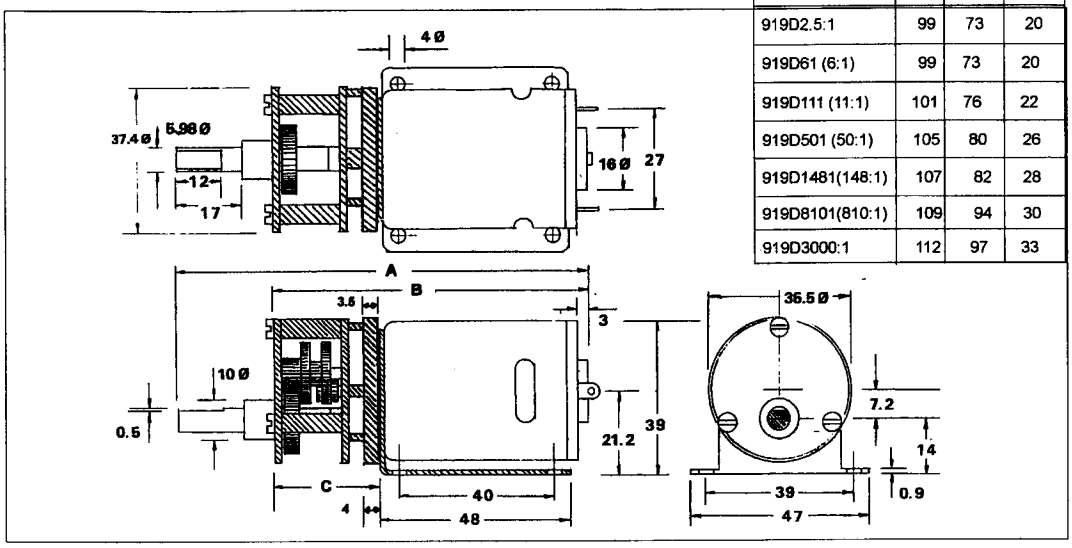
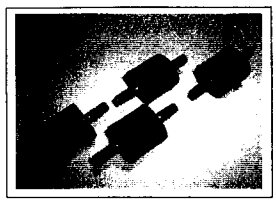
919D SERIES SINGLE RATIO METAL GEARBOX (RE 540/1 MOTOR)

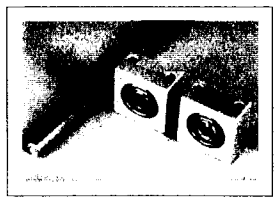
GEARBOX DIMENSIONS



GEARBOX REF.	A	B	C
919D2.5:1	99	73	20
919D61 (6:1)	99	73	20
919D111 (11:1)	101	76	22
919D501 (50:1)	105	80	26
919D1481(148:1)	107	82	28
919D8101(810:1)	109	94	30
919D3000:1	112	97	33

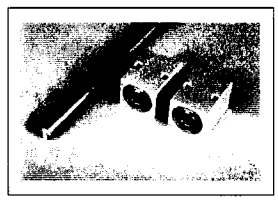


Part No. 1071. Anti vibration mount. M3



Part No. 919D30
Bearing Blocks. 5mm I.D.

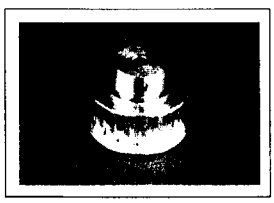
Part No. 919D26
Steel shaft 5mmOD x 150mm

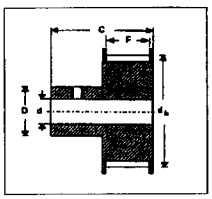


Part No. 919D30/1
Bearing Blocks. 6mm I.D.

Part No. 919D26/1
Steel Shaft 6mmOD x 150mm

TIMING PULLEYS

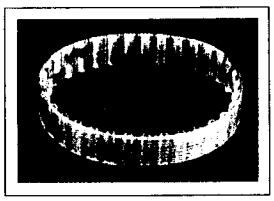




Part No. 919D7 - 14. Timing Pulleys.

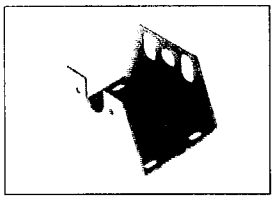
Pt. No.	No. of teeth	d	dk	F	C	D
919D7	14	6	21.45	12	21.0	12
919D8	16	6	24.60	12	21.0	15
919D9	20	6	31.00	12	21.0	15
919D10	25	6	39.00	12	21.0	15
919D11	30	6	46.95	12	21.0	15
919D12	35	6	54.85	12	21.0	15
919D13	40	6	62.85	12	21.0	15
919D14	44	6	69.20	12	21.0	15

TIMING BELTS

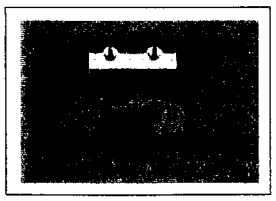


Part No. 919D15 - 23. Timing Belts.

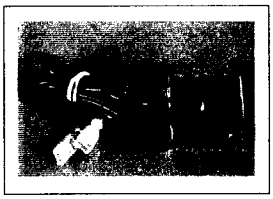
Pt. No.	Length	Width
919D15	165	9.8
919D16	185	9.8
919D17	200	9.8
919D18	305	9.8
919D19	390	9.8
919D20	455	9.8
919D21	545	9.8
919D22	630	9.8
919D23	840	9.8



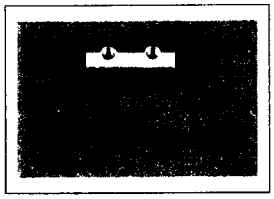
Part No. 919D29
Double ended motor mount.



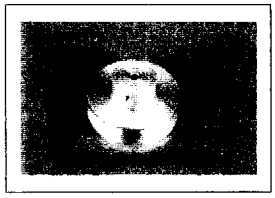
Pt No. 919D1. In-Line Coupling. 6mm - 6mm.(Dia. 12.67mm x 24.8mm)



Pt No. 919D2. Voltage Regulator.(6-15v DC Input. 4v-12v output). 26mm x 31mm x 15.5mm



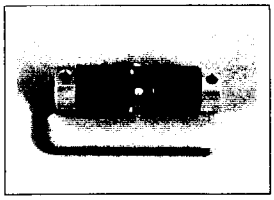
Pt No. 919D3. In-line Coupling. 6mm-8swg (Meccano) Dia. 12.67mm x 24.8mm



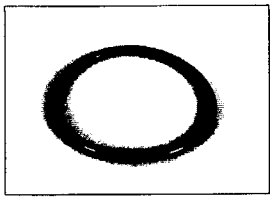
Pt No. 919D4. Pulley 25mm dia. (Aluminium)

Pt.No.919D24. Bevel Gearbox. (Right Angle)

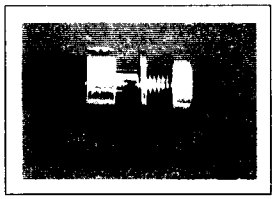
Pt No. 919D5. Pulley 16mm dia. (Aluminium)



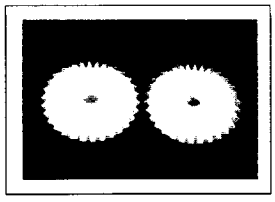
Pt No. 919D6. Universal Coupling. 6mm - 6mm.



Pt No. 917D2515. "O" Ring 70mm x 5mm Dia.



Pt No. 919D27. Gear Adapter.



Pt No. 919D25. Nylon Bevel Gears 1:1. OD30.7mm ID6mm

Subject to minimum order quantities of 250 units, the following ratios are also available with a six week lead-time. The physical dimensions of these other gearboxes may vary from the data as illustrated above. Details of individual gearboxes are available upon request.

GEARBOX 18:1 WITH 540/1 MOTOR.
GEARBOX 70:1 WITH 540/1 MOTOR.
GEARBOX 100:1 WITH 540/1 MOTOR
GEARBOX 200:1 WITH 540/1 MOTOR
GEARBOX 350:1 WITH 540/1 MOTOR
GEARBOX 500:1 WITH 540/1 MOTOR
GEARBOX 900:1 WITH 540/1 MOTOR

GEARBOX 30:1 WITH 540/1 MOTOR.
GEARBOX 75:1 WITH 540/1 MOTOR.
GEARBOX 120:1 WITH 540/1 MOTOR
GEARBOX 250:1 WITH 540/1 MOTOR
GEARBOX 400:1 WITH 540/1 MOTOR
GEARBOX 600:1 WITH 540/1 MOTOR
GEARBOX 1000:1 WITH 540/1 MOTOR

GEARBOX 60:1 WITH 540/1 MOTOR
GEARBOX 90:1 WITH 540/1 MOTOR.
GEARBOX 180:1 WITH 540/1 MOTOR
GEARBOX 300:1 WITH 540/1 MOTOR
GEARBOX 450:1 WITH 540/1 MOTOR
GEARBOX 700:1 WITH 540/1 MOTOR
GEARBOX 1500:1 WITH 540/1 MOTOR

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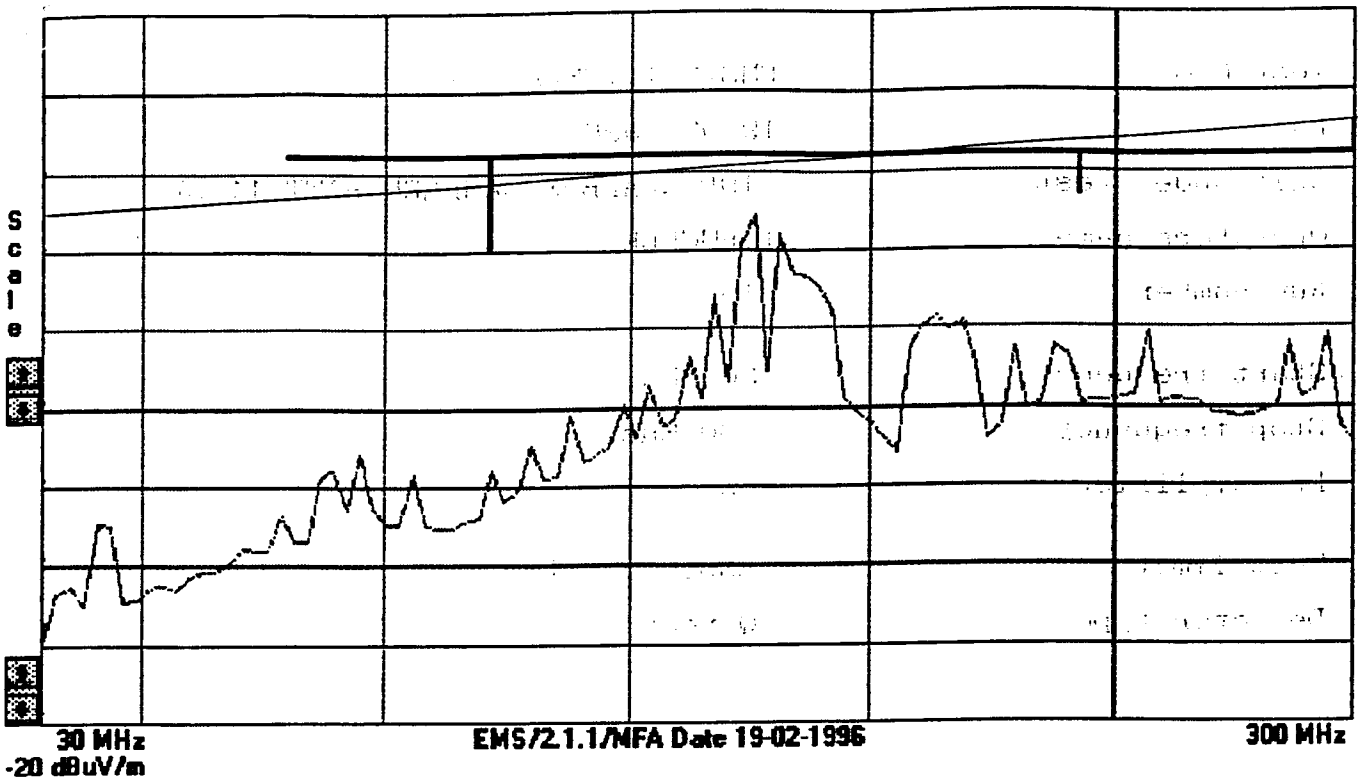


Test Name	EMS/2.1.1/MFA
Date	19-02-1996
Unit under test	919D GEARBOX SAMPLE5 BATT 11.5V
Operators name	I.BUCKLE
Run number	16
Start frequency	30 MHz
Stop frequency	300 MHz
Pre-amplifier	on
Test limits	~~EN55013TVLF~~ EN55014
Detector type	Q-peak

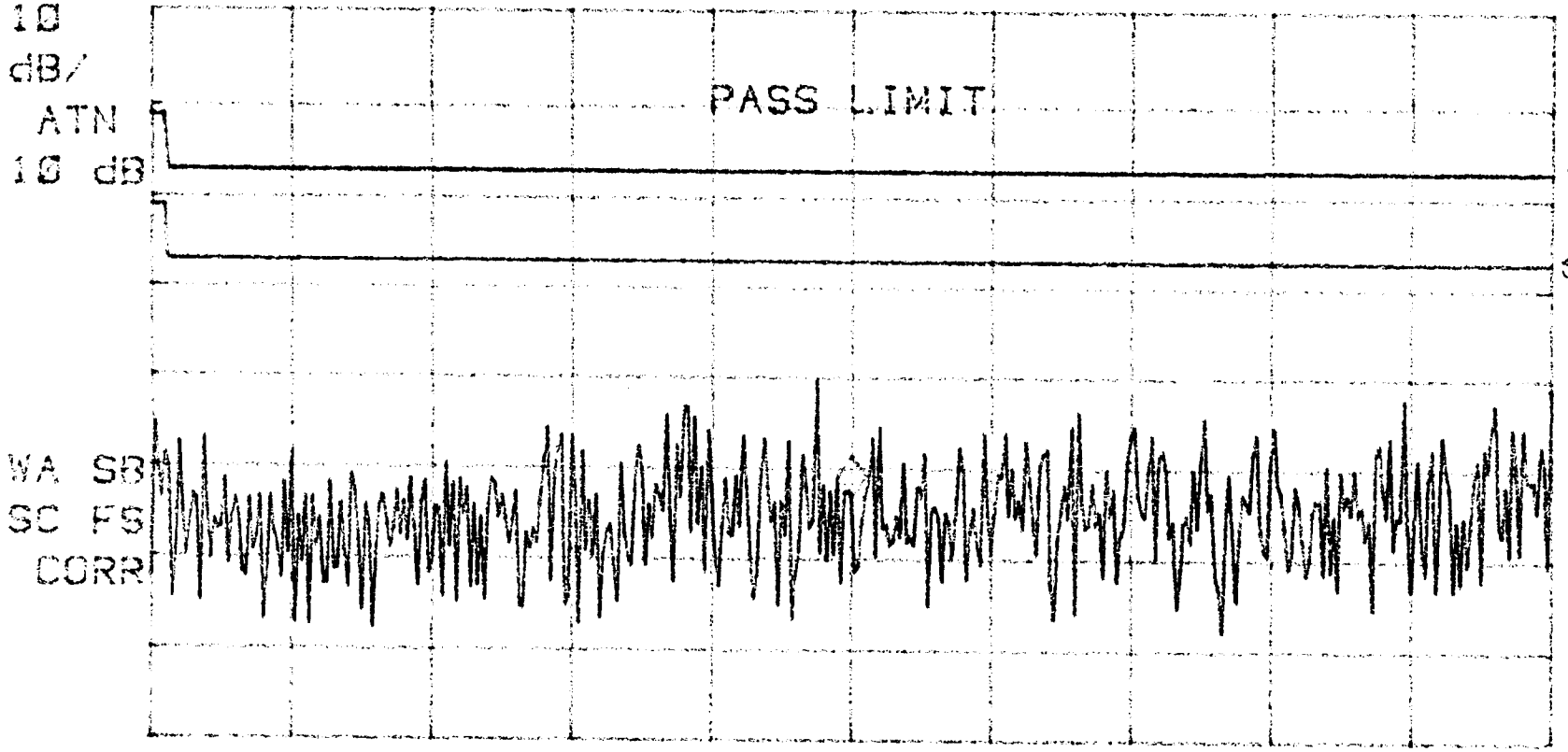
0.22 µf CAPACITOR FITTED

919D with 0.2μF suppression across motor winding

14:37:54 FEB 12. 1996

SWEEPTIME
1.11 sec

ACTV DET: PEAK
MEAS DET: PEAK QP AVG
MKR 15.08 MHz
21.75 dBμV



* Refer to Marlin motor for detail of Voltage Probe & limits.

START 150 kHz
#IF BW 9.0 kHz
AVG BW 30 kHz
STOP 30.00 MHz
SWP 1.11 sec